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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,634	03/05/2002	James Richard Mock SR.	117P60US01	9156

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EXAMINER
KOKABI, AZADEH

ART UNIT	PAPER NUMBER
3751	6

DATE MAILED: 09/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/091,634	MOCK ET AL.	
	Examiner	Art Unit	
	Azy Kokabi	3751	

-- The MAILING DATE of this communication appears on the cover she t with th correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 May 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-5 and 7-22* is/are pending in the application.

4a) Of the above claim(s) *1 and 6* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-5, 7-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 2, 5, 7-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelli et al ('193) in view of Watson ('702).

Nelli discloses a device and method for introducing a chemical into a liquid. The method consists of providing a product (figure 1, #38 and column 4, lines 4-6), providing a permeable bag into which the product is placed (column 3, line 20), and placing the bag into a cavity of a feeder (figure 1, #32). The feeder has an inlet (figure 1, #14) and an outlet (figure 1, #16), which are in fluid communication with the cavity (see figure 1).

Further, Nelli discloses the method of supplying water (figure 1, #34) to the inlet and allowing the water to flood into the cavity to dissolve a portion of the product to create a use

solution (column 4, lines 22-26). The use solution exists through the outlet of the feed and flows into a swimming pool (column 4, lines 32-35).

Nelli further discloses a swimming pool having a circulation system with a pump, filter, (column 1, line 39) and a heater (column 1, line 40) wherein the feeder is in fluid communication with the circulation system (column 1, lines 35-40). Nelli discloses a method of providing a product (figure 1, #38 and column 4, lines 4-6), providing a feeder (figure 1, #10), having a water inlet (figure 1, #14), a cavity (figure 1, #32), a use solution outlet (figure 1, #16) wherein the use solution is in fluid communication with the cavity (see figure 1). Additionally, a permeable member or bag (figure 1, #36) is placed between the product and the use solution outlet (see figure 1) wherein the permeable member prevents products from exiting the cavity through the outlet (see column 3, lines 18-31). The permeable member is a mesh member that covers the use solution outlet (column 3, lines 9-11).

Further, Nelli discloses placing the product in the cavity of the feeder (see column 3, lines 65-66), supplying water (figure 1, #34) to the inlet and allowing the water to flood into the cavity to dissolve a portion of the product to create a use solution (column 4, lines 22-26). The use solution exists through the outlet of the feed and flows into a swimming pool (column 4, lines 32-35). The permeable member is a mesh member that covers the use solution outlet (column 3, lines 9-11).

Although Nelli discloses several chemicals that may be used in the device, Nelli fails to disclose the use of cyanuric acid.

Watson ('702) discloses an apparatus for controlled chlorination of water with an alkali metal dichloroisocyanurate. The dichloroisocyanuric acid is dissolved to form a concentrated

chlorine solution that is slowly released into the water supply. "The natural circulation of water in the standpipe through the solid dichloroisocyanurate charge contained in the apparatus results in chlorination of the water supply at a rate controlled by the size and number of solution metering apertures." (See abstract).

Watson ('702) teaches that alkali metal salts of dichloroisocyanuric acid typically are rapidly and completely soluble in water, which forms a neutral solution of hypochlorous acid and the salt of cyanuric acid (column 1, lines 30-31). The alkali metal salts are preferred as chlorinating agents because they are more soluble and they are not as acidic as other chlorinating agents (column 1, lines 35-36).

It would have been obvious to one of ordinary skill in the art of have provided the device of Nelli, using the product as disclosed by Watson in order to provide for a more soluble and less acidic disinfectant for swimming pools.

4. Claims 3-4, 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelli et al (U.S. Patent No. 3,772,193).

As previously discussed in paragraph 3 above, Nelli further discloses all the limitations as set forth. Nelli further discloses that the regulation of flow of a liquid that can be controlled through a control valve. Nelli teaches that "for a less soluble chemicals, the flow is increased, and for more soluble chemicals, even to the point where there is a nearly saturated solution on the outside of the barrier member, the regulation is achieved by decreasing the flow of water through the device" (see column 5, lines 8-15). The rate in which a product is dispensed depends on the amount of water flowing through the permeable bag (column 5, lines 8-13).

Nelli, however fails to specify the dispensing rate of the product per hour.

It would have been obvious to one of ordinary skill in the art to have provided the approximate dispensing rate of a product per hour since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (see MPEP 2144.05). The dispensing rate of the product can be controlled by the amount of flow through the feeder.

Response to Arguments

4. Applicant's arguments filed 05/19/03 have been fully considered but they are not persuasive. Applicant argues that the Nelli reference does not specify the dispensing rate per hour of cyanuric acid. However, Nelli does teach how to control dispensing of a product. Specifically, Nelli teaches that by means of a control valve, the amount of product dispensed can be regulated. In view of Nelli's teaching, it would have been obvious to provide for a method of controlling the regulation of product that is dispensed, either by a control valve, or permeability of the mesh bag, or the amount of liquid that is passed through the bag.

Applicant further argues that modifying cyanuric acid for the product used in the Nelli device would destroy the intended function of the device and violate NSF Certification standards. However, the modification of the Nelli device with the use of cyanuric acid is obvious in view of Watson because the references teach an improved distribution of a chemical that is known to be used in a pool. The rejection does not destroy the intended function of the Nelli device; it utilizes the dispenser for a known chemical in a pool. Furthermore, the rejection is concerned with a question of obviousness under 35 USC 103(a), not with NSF standards. Applicant has broadly claimed the cyanuric acid dispenser without claiming the combination of the chlorine dispenser that may be utilized in a pool circulation system.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Azy Kokabi whose telephone number is (703) 306-4154. The examiner can normally be reached on Monday- Friday, 6:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (703) 308-2580. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

AK

GREGORY L. HUSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700